

Rec'd PCT/PTO 16 DEC 2004

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
8 January 2004 (08.01.2004)

PCT

(10) International Publication Number
WO 2004/002419 A3

(51) International Patent Classification⁷: **A61K 31/403**,
A61P 9/12, C07D 209/88, 263/20

(21) International Application Number:
PCT/US2003/020408

(22) International Filing Date: 27 June 2003 (27.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/392,175 27 June 2002 (27.06.2002) US

(71) Applicant (for all designated States except US): **SB PHARMCO PUERTO RICO INC.** [US/US]; 105 Ponce de Leon Avenue, 00917 Hato Rey (PR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BROOK, Christopher, S.** [US/US]; 709 Swedeland Road, King of Prussia, PA 19406 (US). **CHEN, Wei** [CN/US]; 1108 Clipper Way, Woodbury, MN 55125 (US). **DELL'ORCO, Philip, C.** [US/US]; 709 Swedeland Road, King of Prussia, PA 19406 (US). **KATRINCIC, Lee, M.** [US/US]; 709 Swedeland Road, King of Prussia, PA 19406 (US). **LOUVET, Ann, Marie** [US/US]; 709 Swedeland Road, King of Prussia, PA 19406 (US). **OH, Choon, K.** [US/US]; 450 Cresson Blvd., Oaks, PA 19455 (US). **SPOORS, Paul, G.** [GB/US]; 709 Swedeland Road, King of Prussia, PA 19406 (US). **WERNER, Christopher** [US/US]; 709 Swedeland Road, King of Prussia, PA 19406 (US).

(74) Agents: **HSU, Grace, C. et al.**; Smithkline Beecham Corporation, Corporate Intellectual Property, UW2220, 709 Swedeland Road, P.O. Box 1539, King of Prussia, PA 19406-0939 (US).

(81) Designated States (*national*): AE, AG, AL, AU, BA, BB, BR, BZ, CA, CN, CO, CR, CU, DM, DZ, EC, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, OM, PH, PL, RO, SC, SG, TN, TT, UA, US, UZ, VN, YU, ZA.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
3 June 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **CARVEDILOL PHOSPHATE SALTS AND/OR SOLVATES THEREOF, CORRESPONDING COMPOSITIONS, AND/OR METHODS OF TREATMENT**

(57) Abstract: The present invention relates to carvedilol phosphate salts, which include novel crystalline forms of carvedilol dihydrogen phosphate (i.e., dihydrogen phosphate salt of 1-(carbazol-4-yloxy-3-[[2-(o-methoxyphenoxy) ethyl]amino]-2-propanol) and/or carvedilol hydrogen phosphate, etc.), and/or solvates thereof, compositions containing the aforementioned salts and/or solvates, and methods of using the aforementioned salts and/or solvates to treat hypertension, congestive heart failure and angina, etc.

WO 2004/002419 A3